AUTOMATED FILTER TESTER MODEL 8150

TAKING HIGH PERFORMANCE FROM THE LAB TO THE PRODUCTION LINE

The Automated Filter Tester Model 8150 is for 100% quality assurance testing of P100, FFP3 and similar respiratory filters and cartridges directly in the production line. The 8150 is a highly compact automated filter tester that can easily be retrofitted into any existing production line. Using much of the same technologies, it provides matching results to the model 8130A while being optimized for high-volume throughput and round-the-clock remote operation.



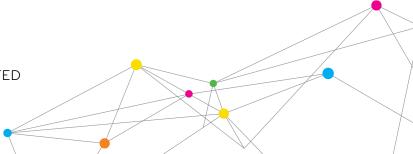
TSI's Automated Filter Testers have been used in quality control and manufacturing for more than 35 years. The model 8130A is used by the leading filter and filter media manufacturers, test laboratories, and government agencies around the world due to its proven performance, durability and reliability.

The model 8150 is an evolution of the 8130A, that has been optimized for demanding in-line production testing applications, giving you faster measurement and cycle times for high-throughput. It incorporates two simultaneously measuring photometers - upstream and downstream of the filter - to eliminate measurement uncertainties due to any change in aerosol concentration. The 8150 also utilizes an innovative concept for aerosol delivery that reduces the number of valves and improves uptime. For especially tight spaces, the photometer box can be split from the base unit or two units can be stacked. The 8150 operates through a PLC driven interface and contains a comprehensive set of internal diagnostics to provide you with complete confidence of your filter efficiency measurements.

Features and Benefits

- + Fast measurement & cycle times for high-throughput
- + Excellent comparability of results to the model 8130A that is used for certification
- + Small footprint for easy integration into existing and new production lines
- + Two simultaneously measuring photometers for best performance
- + Fast recovery time after detecting defective filters to minimize subsequent false failures
- + Supports compliance with standards such as US 42 CFR 84, GB2626, and EN143/EN149
- + Intelligent design for increased uptime





SPECIFICATIONS

AUTOMATED FILTER TESTER MODEL 8150

Aerosol Detection

Technique Two simultaneously measuring light-scattering laser photometers

1.0 μg/m³ to >200 mg/m³ Dynamic Range

Performance

Operating Range Up to 99.995% efficiency Oil Only Tester Compatible with DOP, Paraffin, PAO & DEHS

Contact your TSI representative Test time

Pressure Measurement

Technique Electronic pressure transducer Range 0 to 250 mm H_2 0 (0 to 2500 Pa), other ranges available upon request

Accuracy ±1% of full scale

Aerosol Flow (external vacuum flow required)

Volumetric flow TSI Model 4045 flow meter with pressure and temperature

Flow Rate Range Adjustable from 10 to 120 L/min Flow Rate Monitored and adjusted automatically

to setpoint

±2% of reading or 0.05 Std L/min, Accuracy

whichever is greater

Operating Range

75 to 110 kPa (absolute) Ambient pressure

Ambient temperature 10°C to 35°C

Operating humidity 0% to 95%, non-condensing

Automation Interface

- + Modbus-based command set via Ethernet
- + Serial commands via RS-232

Pump / Filter Holder

Not included, custom designs and considerations are in the hands of the customer/integrator

Utility Requirements and Physical Parameters

90 VAC to 250 VAC, 50 Hz to 60 Hz, 10 A max. Power Compressed Air 80 psig, 7 scfm (550 kPa, 200 std. L/min

average, 250 std. L/min max.) Dimensions (L x W x H) 64.5 cm × 55.5 cm × 104.5 cm (25.4 in. × 21.9 in. × 41.2 in.)

100 kg (220 lbs) Weight

Accessories and Options

- + Built-in neutralizer
- + Automatic aerosol generator refill
- + External pump (110V/220V)
- + Control unit with reference filter chuck for operating the 8150 outside the production line

Compliance

CE*, RoHS, North America Safety Mark (NRTL), optional CSA

*Partly completed machinery according to EC - Directive for Machines 2006/42/EC, Annex II, 1. B, requires proper integration into production line especially regarding safety considerations

TO ORDER

Automated Filter Testing

Specify 8150 8150N Description Automated filter tester 8150 with neutralizer

8150R 8150NR 8150 with automatic refill 8150 with neutralizer & automatic refill

Accessories

Specify 8130A-18631 Description External pump 8150-P500 8150-MKIT Control unit Maintenance parts kit

Service and Support

- + Field Installation and Training (subject to location) + Training for user-serviceable photometer on-site/at TSI
- + Service Contracts
- + Field Service

Contact your TSI representative for more details

Specifications are subject to change without notice.

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